RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 09/016,159E
Source: IFW16
Date Processed by STIC: 9-7-05

ENTERED

IFW16

RAW SEQUENCE LISTING DATE: 09/07/2005
PATENT APPLICATION: **US/09/016,159E** TIME: 14:13:15

Input Set : **A:\106-001US2 seq listing.txt**
Output Set: **N:\CRF4\09072005\I016159E.raw**

```
 3 <110> APPLICANT: Lee, Jong Y.
 5 <120> TITLE OF INVENTION: PURIFIED HUMAN ERYTHROPOIETIN RECEPTOR PROTEIN FRAGMENT AND
 6       ANTIBODIES DERIVED THEREFROM
 8 <130> FILE REFERENCE: 106.001US2
10 <140> CURRENT APPLICATION NUMBER: US 09/016,159E
11 <141> CURRENT FILING DATE: 1998-01-30
13 <150> PRIOR APPLICATION NUMBER: US 08/876,227
14 <151> PRIOR FILING DATE: 1997-06-16
16 <160> NUMBER OF SEQ ID NOS: 5
18 <170> SOFTWARE: PatentIn version 3.3
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 23
22 <212> TYPE: DNA
23 <213> ORGANISM: Artificial
25 <220> FEATURE:
26 <223> OTHER INFORMATION: BamH1 linker at 5' end followed by sequence for amino acids
25
27       through 29 of full length EpoR protein. Forward primer for SEQ
28       ID NO:2.
30 <400> SEQUENCE: 1
31 ttggatccgc gcccccgcct aac                                          23
34 <210> SEQ ID NO: 2
35 <211> LENGTH: 22
36 <212> TYPE: DNA
37 <213> ORGANISM: Artificial
39 <220> FEATURE:
40 <223> OTHER INFORMATION: EcoR1 linker followed by sequence complementary to coding
41       sequence for amino acids 226 through 222 of full length human
42       EpoR protein. Reverse primer for SEQ ID NO:1.
44 <400> SEQUENCE: 2
45 tgaattcggg gtccaggtcg ct                                           22
48 <210> SEQ ID NO: 3
49 <211> LENGTH: 18
50 <212> TYPE: DNA
51 <213> ORGANISM: Homo sapiens
53 <300> PUBLICATION INFORMATION:
54 <301> AUTHORs: Smith, D.B. et al.
55 <302> TITLE: Single-step purification of polypeptides expressed in Escherichia
56       coli as fusions with glutathione-S-transferase
57 <303> JOURNAL: Gene
58 <304> VOLUME: 67
59 <306> PAGES: 31-40
60 <307> DATE: 1998
62 <300> PUBLICATION INFORMATION:
```

RAW SEQUENCE LISTING DATE: 09/07/2005
PATENT APPLICATION: US/09/016,159E TIME: 14:13:15

Input Set : A:\106-001US2 seq listing.txt
Output Set: N:\CRF4\09072005\I016159E.raw

63 <301> AUTHORs: Smith, D.B. et al.
64 <302> TITLE: Single-step purification of polypeptides expressed in Escherichia
65 coli as fusions with glutathione-S-transferase
66 <303> JOURNAL: Genes and Development
67 <304> VOLUME: 67
68 <306> PAGES: 31-40
69 <307> DATE: 1998

71 <400> SEQUENCE: 3
72 ctggttccgc gtggatcc 18
75 <210> SEQ ID NO: 4
76 <211> LENGTH: 1527
77 <212> TYPE: DNA
78 <213> ORGANISM: Homo sapiens

80 <300> PUBLICATION INFORMATION:
81 <301> AUTHORs: Jones, S.S. et al.
82 <302> TITLE: Human Erythropoietin Receptor: Cloning, expression, and
83 biological characterization
84 <303> JOURNAL: Blood
85 <304> VOLUME: 76
86 <305> ISSUE: 1
87 <306> PAGES: 31-35
88 <307> DATE: 1990-07-01

90 <400> SEQUENCE: 4
91 atggaccacc tcggggcgtc cctctggccc caggtcggct ccctttgtct cctgctcgct 60
93 ggggccgcct gggcgccccc gcctaacctc ccggacccca agttcgagag caaagcggcc 120
95 ttgctggcgg cccgggggcc cgaagagctt ctgtgcttca ccgagcggtt ggaggacttg 180
97 gtgtgtttct gggaggaagc ggcgagcgct ggggtgggcc cgggcaacta cagcttctcc 240
99 taccagctcg aggatgagcc atggaagctg tgtcgcctgc accaggctcc cacggctcgt 300
101 ggtgcggtgc gcttctggtg ttcgctgcct acagccgaca cgtcgagctt cgtgccccta 360
103 gagttgcgcg tcacagcagc ctccggcgct ccgcgatatc accgtgtcat ccacatcaat 420
105 gaagtagtgc tcctagacgc ccccgtgggg ctggtggcgc ggttggctga cgagagcggc 480
107 cacgtagtgt tgcgctggct cccgccgcct gagacaccca tgacgtctca catccgctac 540
109 gaggtggacg tctcggccgg caacggcgca gggagcgtac agagggtgga gatcctggag 600
111 ggccgcaccg agtgtgtgct gagcaacctg cggggccgga cgcgctacac cttcgccgtc 660
113 cgcgcgcgta tggctgagcc gagcttcggc ggcttctgga gcgcctggtc ggagcctgtg 720
115 tcgctgctga cgcctagcga cctggacccc ctcatcctga cgctctccct catcctcgtg 780
117 gtcatcctgg tgctgctgac cgtgctcgcg ctgctctccc accgccgggc tctgaagcag 840
119 aagatctggc ctggcatccc gagcccagag agcgagtttg aaggcctctt caccacccac 900
121 aagggtaact tccagctgtg gctgtaccag aatgatggct gcctgtggtg gagcccctgc 960
123 acccccttca cggaggaccc acctgcttcc ctggaagtcc tctcagagcg ctgctggggg 1020
125 acgatgcagg cagtggagcc ggggacagat gatgagggcc ccctgctgga gccagtgggc 1080
127 agtgagcatg cccaggatac ctatctggtg ctggacaaat ggttgctgcc ccggaacccg 1140
129 cccagtgagg acctcccagg gcctggtggc agtgtggaca tagtggccat ggatgaaggc 1200
131 tcagaagcat cctcctgctc atctgctttg gcctcgaagc ccagcccaga gggagcctct 1260
133 gctgccagct ttgagtacac tatcctggac cccagctccc agctcttgcg tccatggaca 1320
135 ctgtgccctg agctgccccc taccccaccc cacctaaagt acctgtacct tgtggtatct 1380
137 gactctggca tctcaactga ctacagctca ggggactccc agggagccca agggggctta 1440
139 tccgatggcc cctactccaa cccttatgag aacagcctta tcccagccgc tgagcctctg 1500
141 ccccccagct atgtggcttg ctcttag 1527

RAW SEQUENCE LISTING DATE: 09/07/2005
PATENT APPLICATION: US/09/016,159E TIME: 14:13:15

Input Set : A:\106-001US2 seq listing.txt
Output Set: N:\CRF4\09072005\I016159E.raw

144 <210> SEQ ID NO: 5
145 <211> LENGTH: 508
146 <212> TYPE: PRT
147 <213> ORGANISM: Homo sapiens
149 <300> PUBLICATION INFORMATION:
150 <301> AUTHORs: Jones, S.S. et al.
151 <302> TITLE: Human Erythropoietin Receptor: Cloning, expression, and
152 biological characterization
153 <303> JOURNAL: Blood
154 <304> VOLUME: 76
155 <305> ISSUE: 1
156 <306> PAGES: 31-35
157 <307> DATE: 1990-07-01
159 <400> SEQUENCE: 5

```
161 Met Asp His Leu Gly Ala Ser Leu Trp Pro Gln Val Gly Ser Leu Cys
162 1               5                  10                  15
165 Leu Leu Leu Ala Gly Ala Ala Trp Ala Pro Pro Pro Asn Leu Pro Asp
166             20                  25                  30
169 Pro Lys Phe Glu Ser Lys Ala Ala Leu Leu Ala Ala Arg Gly Pro Glu
170         35                  40                  45
173 Glu Leu Leu Cys Phe Thr Glu Arg Leu Glu Asp Leu Val Cys Phe Trp
174     50                  55                  60
177 Glu Glu Ala Ala Ser Ala Gly Val Gly Pro Gly Asn Tyr Ser Phe Ser
178 65                  70                  75                  80
181 Tyr Gln Leu Glu Asp Glu Pro Trp Lys Leu Cys Arg Leu His Gln Ala
182                 85                  90                  95
185 Pro Thr Ala Arg Gly Ala Val Arg Phe Trp Cys Ser Leu Pro Thr Ala
186             100                 105                 110
189 Asp Thr Ser Ser Phe Val Pro Leu Glu Leu Arg Val Thr Ala Ala Ser
190         115                 120                 125
193 Gly Ala Pro Arg Tyr His Arg Val Ile His Ile Asn Glu Val Val Leu
194     130                 135                 140
197 Leu Asp Ala Pro Val Gly Leu Val Ala Arg Leu Ala Asp Glu Ser Gly
198 145                 150                 155                 160
201 His Val Val Leu Arg Trp Leu Pro Pro Pro Glu Thr Pro Met Thr Ser
202                 165                 170                 175
205 His Ile Arg Tyr Glu Val Asp Val Ser Ala Gly Asn Gly Ala Gly Ser
206             180                 185                 190
209 Val Gln Arg Val Glu Ile Leu Glu Gly Arg Thr Glu Cys Val Leu Ser
210         195                 200                 205
213 Asn Leu Arg Gly Arg Thr Arg Tyr Thr Phe Ala Val Arg Ala Arg Met
214     210                 215                 220
217 Ala Glu Pro Ser Phe Gly Gly Phe Trp Ser Ala Trp Ser Glu Pro Val
218 225                 230                 235                 240
221 Ser Leu Leu Thr Pro Ser Asp Leu Asp Pro Leu Ile Leu Thr Leu Ser
222                 245                 250                 255
225 Leu Ile Leu Val Val Ile Leu Val Leu Leu Thr Val Leu Ala Leu Leu
226             260                 265                 270
229 Ser His Arg Arg Ala Leu Lys Gln Lys Ile Trp Pro Gly Ile Pro Ser
```

RAW SEQUENCE LISTING DATE: 09/07/2005
PATENT APPLICATION: US/09/016,159E TIME: 14:13:15

Input Set : A:\106-001US2 seq listing.txt
Output Set: N:\CRF4\09072005\I016159E.raw

```
230         275                 280                 285
233 Pro Glu Ser Glu Phe Glu Gly Leu Phe Thr Thr His Lys Gly Asn Phe
234     290                 295                 300
237 Gln Leu Trp Leu Tyr Gln Asn Asp Gly Cys Leu Trp Trp Ser Pro Cys
238 305                 310                 315                 320
241 Thr Pro Phe Thr Glu Asp Pro Pro Ala Ser Leu Glu Val Leu Ser Glu
242                 325                 330                 335
245 Arg Cys Trp Gly Thr Met Gln Ala Val Glu Pro Gly Thr Asp Asp Glu
246             340                 345                 350
249 Gly Pro Leu Leu Glu Pro Val Gly Ser Glu His Ala Gln Asp Thr Tyr
250         355                 360                 365
253 Leu Val Leu Asp Lys Trp Leu Leu Pro Arg Asn Pro Pro Ser Glu Asp
254     370                 375                 380
257 Leu Pro Gly Pro Gly Gly Ser Val Asp Ile Val Ala Met Asp Glu Gly
258 385                 390                 395                 400
261 Ser Glu Ala Ser Ser Cys Ser Ser Ala Leu Ala Ser Lys Pro Ser Pro
262                 405                 410                 415
265 Glu Gly Ala Ser Ala Ala Ser Phe Glu Tyr Thr Ile Leu Asp Pro Ser
266             420                 425                 430
269 Ser Gln Leu Leu Arg Pro Trp Thr Leu Cys Pro Glu Leu Pro Pro Thr
270         435                 440                 445
273 Pro Pro His Leu Lys Tyr Leu Tyr Leu Val Val Ser Asp Ser Gly Ile
274     450                 455                 460
277 Ser Thr Asp Tyr Ser Ser Gly Asp Ser Gln Gly Ala Gln Gly Gly Leu
278 465                 470                 475                 480
281 Ser Asp Gly Pro Tyr Ser Asn Pro Tyr Glu Asn Ser Leu Ile Pro Ala
282                 485                 490                 495
285 Ala Glu Pro Leu Pro Pro Ser Tyr Val Ala Cys Ser
286             500                 505
```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 09/07/2005
PATENT APPLICATION: **US/09/016,159E** TIME: 14:13:16

Input Set : **A:\106-001US2 seq listing.txt**
Output Set: **N:\CRF4\09072005\I016159E.raw**

Invalid <213> Response:
Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2

VERIFICATION SUMMARY DATE: 09/07/2005
PATENT APPLICATION: **US/09/016,159E** TIME: 14:13:16

Input Set : **A:\106-001US2 seq listing.txt**
Output Set: **N:\CRF4\09072005\I016159E.raw**